ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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2003031

September 17, 2018

Karen Kirchner
Superfund Division
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604-3590

Refer to: 2010300074 - Winnebago County
Southeast Rockford Groundwater Contamination NPL Site
Superfund/Technical

Dear Ms. Kirchner:

The Illinois Environmental Protection Agency (Illinois EPA) has determined that Source Control Operable Unit (SCOU, or OU3) remedial action (RA) activities are complete at Source Area 4 (Area 4) of the Southeast Rockford Groundwater Contamination Superfund (SERGC) site and requests concurrence from the U.S. Environmental Protection Agency (USEPA).

For each source area within SERGC, the OU3 Record of Decision (ROD) specifies separate remedies for "leachate" (i.e., shallow, contaminated groundwater within the source area) and soil.

The leachate component remedy selected for Area 4 consists of the hydraulic containment of leachate, treatment, and onsite discharge. Construction of the leachate component RA began in August of 2009, was substantially complete in December 2009, and was declared operational and functional on October 6, 2010. The Area 4 leachate component RA is documented in, "Interim Leachate Component Remedial Action Completion Report, Source Area 4, Southeast Rockford Groundwater Contamination Superfund Site" dated February 2011, and was approved by USEPA on February 18, 2011. Although modifications were made to the system to mitigate iron-related bacteria fouling and various parts have been replaced over time, the system is still operating as originally designed.

The Area 4 leachate component remedy also includes groundwater monitoring through the establishment of a Groundwater Management Zone (GMZ). Starting with a baseline groundwater sampling event conducted in November 2009 just before the treatment system started operation, GMZ monitoring was performed quarterly for two years and then semiannually beginning in 2012 with the most recent monitoring event conducted in May 2018.

The soil component remedy originally selected for Area 4 was ex-situ thermal remediation through excavation and onsite low-temperature thermal desorption. The remedy was subsequently modified to in situ thermal remediation by electrical resistance heating (ERH) through an Explanation of Significant Differences.

Construction of the Area 4 soil component began in July 2016. Soil treatment activities were completed on February 22, 2017 after three rounds of confirmatory soil sampling. Demobilization was finished on April 16, 2017. The Area 4 soil component RA is documented in the "Soil Component Remedial Action Completion Report, Source Area 4, Southeast Rockford Groundwater Contamination Superfund Site", dated December 2017, and was approved by USEPA on December 13, 2017.

The "Source Area 4 Groundwater Management Zone, 2017 Report" dated May 2018, and the attached groundwater monitoring analytical results for GMZ sampling conducted in May 2018 document that no groundwater standards have been exceeded for the past year. This includes samples collected from replacement monitoring well MW-408A that was installed within the soil component RA thermal treatment zone. A figure of the GMZ monitoring well network is also attached.

Further, since completion of the soil component remedy, almost all groundwater contaminant concentrations in the GMZ network have been less than the background concentrations observed in upgradient monitoring well MW-32. (A variety of contaminants have been detected in MW-32 at low concentrations since the start of GMZ sampling, including TCE at concentrations greater than its remedial goal from 2009 to 2011, that is considered representative of background conditions of the overall SERGC site.)

Therefore, Illinois EPA proposes to shut down and decommission the existing leachate containment and treatment system. Illinois EPA will also terminate the GMZ in place at Source Area 4. Illinois EPA will subsequently prepare a comprehensive RA report that documents the completion of leachate and soil RA activities at Source Area 4. However, because Area 4 is hydrogeologically upgradient of Source Area 11 and downgradient of Source Area 7, Illinois EPA will continue some limited groundwater monitoring at Source Area 4 to support RD/RA activities underway at both areas. Finally, although the SCOU record of decision specifies groundwater use restrictions within the Area 4 GMZ, similar groundwater use restrictions under the site-wide operable unit (OU2) will remain in place and continue unaffected by the completion of RA activities at Area 4.

Please provide a formal, written response with USEPA's concurrence with the proposed shut down and decommissioning of the leachate system based on the achievement of the remedial action goals at Area 4 or reasons for disagreeing with Illinois EPA's determination.

If you have any questions regarding anything in this letter or require any additional information, please contact me at (217) 557-8155 or via electronic mail at *brian.conrath@illinois.gov*.

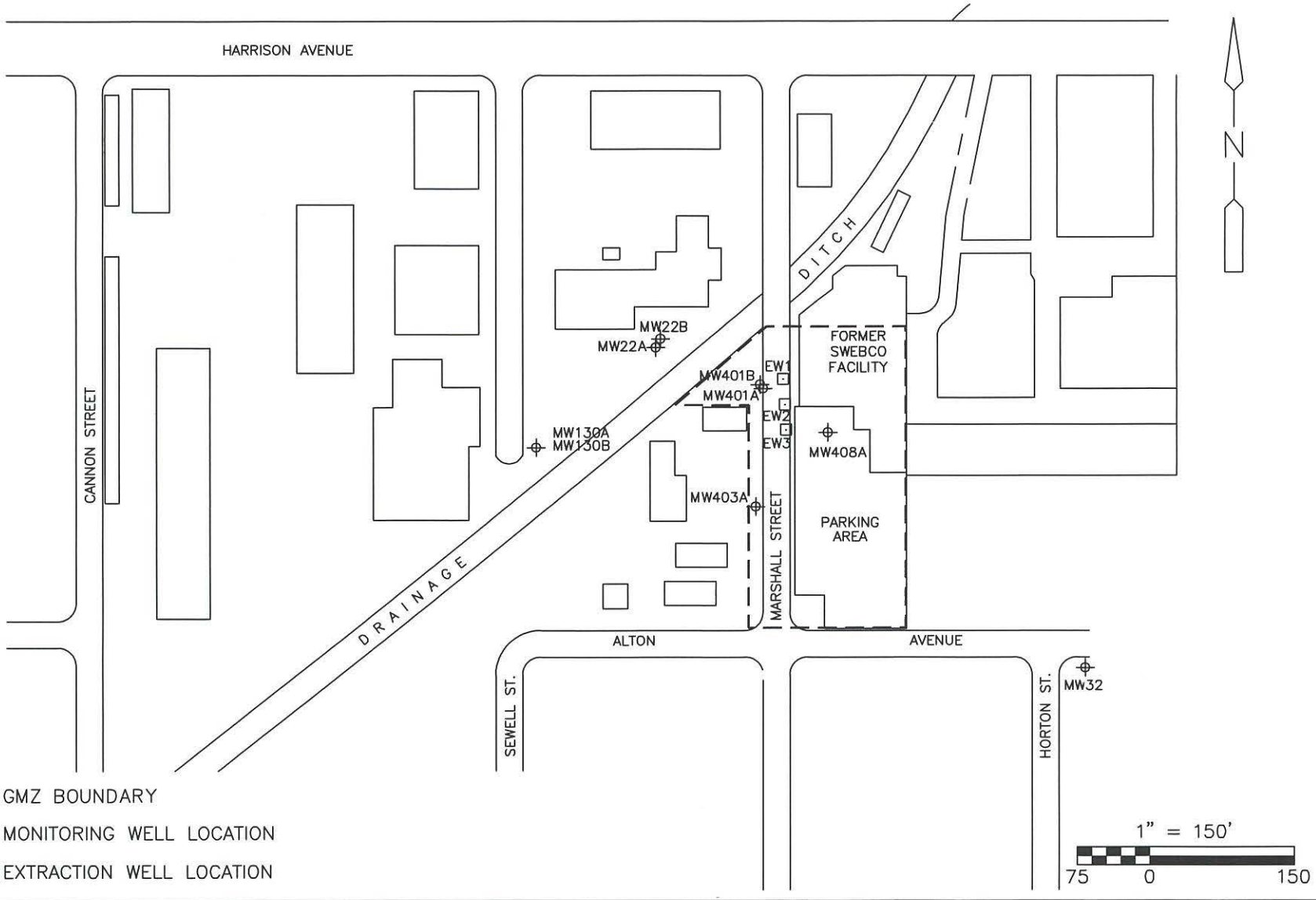
Respectfully,

Brian A. Conrath

Brian A. Conrath
Remedial Project Manager
Federal Site Remediation Section
Bureau of Land

BAC:MVH:CLS:p:\\SERockford\Area 4\Area4decomreqltr.docx

Attachments



SOUTHEAST ROCKFORD GROUNDWATER CONTAMINATION SUPERFUND SITE
SOURCE CONTROL OPERABLE UNIT
ROCKFORD, ILLINOIS

CDM Smith

AREA 4 VICINITY MAP

Figure No. 2

PLOT DATE: 2/12/2018 8:30 AM PLOTTED BY: SCHAMBER, ANDREW R. DWG LOCATION: C:\Users\schamberar\Desktop\FIGURE-2.dwg

Station Location:		A4-EW001		A4-EW002		A4-EW003		A4-MW130A		A4-MW130B	
Sample ID:		A4-EW001-180522		A4-EW002-180522		A4-EW003-180522		A4-MW130A-180523		A4-MW130B-180523	
Sample Date:		5/22/2018		5/22/2018		5/22/2018		5/23/2018		5/23/2018	
Sample Type:		N		N		N		N		N	
Analyte	**RG**										
1,1,1-Trichloroethane	200	**5.3**		**6.1**		**4**		**5.9**		**7.3**	
1,1-Dichloroethane	1,400	**6.7**		**8.1**		**5.6**		**8.2**		**10**	
1,1-Dichloroethene	7	**0.56**		**1.1**		**1.3**		**2**		**1.5**	
2-Butanone	4,200	5	U	5	U	5	U	5	U	5	U
Acetone	6,300	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	0.2*	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	70	0.5	U	0.5	U	0.63	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	70	**1.3**		**1.6**		**1.2**		**1.4**		**2.1**	
Ethyl Benzene	700	0.5	U	0.5	U	**0.24**	**J**	0.5	U	0.5	U
Isopropyl Benzene	700	0.5	U	0.5	U	**0.22**	**J**	0.5	U	0.5	U
m,p-Xylene	NA	0.5	U	0.5	U	**0.81**		0.5	U	**0.21**	**J**
o-Xylene	NA	0.5	U	0.5	U	**0.6**		0.5	U	0.5	U
Tetrachloroethene	5	**0.31**	**J**	**0.45**	**J**	**0.46**	**J**	**0.31**	**J**	**0.38**	**J**
Toluene	1,000	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	100	**0.18**	**J**	**0.23**	**J**	**0.16**	**J**	**0.19**	**J**	**0.24**	**J**
Trichloroethene	5	**1.2**		**1.4**		**0.92**		**1.3**		**1.5**	
Trichlorofluoromethane (Freon 11)	2,100	0.5	U	0.5	U	0.5	U	0.5	U	**0.2**	**J**
Total Xylenes	10,000	0.5	U	0.5	U	**1.41**		0.5	U	**0.21**	**J**

Notes:
All units in microgram per liter (ug/L)
Remediation goals from Record of Decision or Class I Groundwater Standard from 35 IAC 620.410
* = Remediation goal from TACO (35 IAC 742)
U = Analyte included in the analysis, but not detected at or above the quantitation limit.
UJ = The analyte was not detected at or above the quantitation limit. The quantitation limit is an estimate.
J = The identification of the analyte is acceptable; the reported value is an estimate.

Station Location:		A4-MW22A		A4-MW22B		A4-MW32		A4-MW32		A4-MW401A	
Sample ID:		A4-MW22A-180523		A4-MW22B-180523		A4-MW32-180522		A4-MW32-180522-D		A4-MW401A-180522	
Sample Date:		5/23/2018		5/23/2018		5/22/2018		5/22/2018		5/22/2018	
Sample Type:		N		N		N		FD		N	N
Analyte	**RG**										
1,1,1-Trichloroethane	200	**2.9**		**5.1**		**9.3**		**9.9**		**6**	
1,1-Dichloroethane	1,400	0.5	U	**6.9**		**11**		**12**		**8.2**	
1,1-Dichloroethene	7	0.5	U	**0.94**		**2.1**		**2.2**		**1.3**	
2-Butanone	4,200	5	U	5	U	5	U	5	U	5	U
Acetone	6,300	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	0.2*	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	70	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	70	0.5	U	**1.4**		**2.3**		**2.5**		**1.7**	
Ethyl Benzene	700	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropyl Benzene	700	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethene	5	0.5	U	**0.29**	**J**	**0.58**		**0.61**		**0.39**	**J**
Toluene	1,000	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	100	0.5	U	**0.19**	**J**	**0.31**	**J**	**0.34**	**J**	**0.22**	**J**
Trichloroethene	5	0.5	U	**1**		**3**		**3.3**		**1.4**	
Trichlorofluoromethane (Freon 11)	2,100	0.5	U	**0.17**	**J**	0.5	U	0.5	U	**0.12**	**J**
Total Xylenes	10,000	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

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Station Location:		A4-MW401B		A4-MW403		A4-MW408A		A4-MW408A		A4-FB01-180522	
Sample ID:		A4-MW401B-180522		A4-MW403-180523		A4-MW408A-180523		A4-MW408A-180523-D			
Sample Date:		5/22/2018		5/23/2018		5/23/2018		5/23/2018		5/22/2018	
Sample Type:		N	N	N	N	N	N	FD		FB	
Analyte	**RG**										
1,1,1-Trichloroethane	200	**6**		**2.1**		**3.5**		**3.5**		0.5	U
1,1-Dichloroethane	1,400	**8.3**		**3.5**		**9.9**		**9.9**		0.5	U
1,1-Dichloroethene	7	**1.4**		**0.56**		**1.6**		**1.7**		0.5	U
2-Butanone	4,200	5	U	5	U	5	U	5	U	**2.2**	**J**
Acetone	6,300	5	U	5	U	5	U	5	U	10	U
Bromodichloromethane	0.2*	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	70	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	70	**1.7**		**0.69**		**1.9**		**1.9**		0.5	U
Ethyl Benzene	700	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropyl Benzene	700	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	NA	**0.14**	**J**	**0.19**	**J**	**0.15**	**J**	**0.16**	**J**	0.5	U
o-Xylene	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethene	5	**0.34**	**J**	**0.19**	**J**	**0.24**	**J**	**0.25**	**J**	0.5	U
Toluene	1,000	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	100	**0.24**	**J**	0.5	U	**0.26**	**J**	**0.25**	**J**	0.5	U
Trichloroethene	5	**1.4**	**J**	**0.35**	**J**	**0.72**		**0.72**		0.5	U
Trichlorofluoromethane (Freon 11)	2,100	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total Xylenes	10,000	**0.14**	**J**	**0.19**	**J**	**0.15**	**J**	**0.16**	**J**	0.5	U

Notes:
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	Station Location:		
	Sample ID:	A4-TB01-180522	
	Sample Date:	5/22/2018	
	Sample Type:	TB	
Analyte	**RG**		
1,1,1-Trichloroethane	200	0.5	U
1,1-Dichloroethane	1,400	0.5	U
1,1-Dichloroethene	7	0.5	U
2-Butanone	4,200	5	U
Acetone	6,300	**4**	**J**
Bromodichloromethane	0.2*	**0.42**	**J**
Chloroform	70	**1.5**	
cis-1,2-Dichloroethene	70	0.5	U
Ethyl Benzene	700	0.5	U
Isopropyl Benzene	700	0.5	U
m,p-Xylene	NA	0.5	U
o-Xylene	NA	0.5	U
Tetrachloroethene	5	0.5	U
Toluene	1,000	**0.12**	**J**
trans-1,2-Dichloroethene	100	0.5	U
Trichloroethene	5	0.5	U
Trichlorofluoromethane (Freon 11)	2,100	0.5	U
Total Xylenes	10,000	0.5	U

Notes:
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